Wyoming Department of Environmental Quality
Water Quality Division
WYPDES (Wyoming Pollutant Discharge Elimination System) Program

STATEMENT OF BASIS

MAJOR MODIFICATION

APPLICANT NAME:	Aethon Energy Operating, LLC
MAILING ADDRESS:	12377 Merit Drive, Suite 1200 Dallas, TX 75251
FACILITY LOCATION:	Frenchie Draw, which is located in Sections NENE 16, SENE 17, NWNE 15, NENW 5, Township 37N, Range 89W, Fremont County. The wastewater will discharge to Alkali Creek (class 3B), which is tributary to Badwater Creek (class 2AB), within the Boysen Reservoir Basin.
PERMIT NUMBER:	WY0002062

This permit modification was revised following its public notice period, to incoporate public comments as follows:

1) ***Additional supporting information is added to the Statement of Basis regarding WDEQ's analysis of reasonable potential for certain chemical constituents to exceed instream water quality standards.***
2) ***Outfall sampling requirement under low-flow discharge conditions is clarified under Part I.A.1.a. Sampling at outfalls is contingent upon discharges reaching Alkali Creek, rather than the outfall discharging for a minimum number of days.***
3) ***Routine sampling for Radium and Barium is moved from outfalls to downstream monitoring point DMP1. See Part I.A.2.d.***
4) ***Correction is made in parameter sampling table (Part I.A.1.a) to reflect accurate final effluent limit date of 9/1/2024 for Chloride.***
5) ***Permittee mailing address is updated.***

Based on new information submitted by the permittee, this permit is being modified by WDEQ. No siginificant changes to the facility are occurring in the field, and the net effluent output at the facility remains unchanged. This permit was renewed in October of 2020. The purpose of this modification is to update the permit so that it reflects current effluent chemistry and operating conditions at the facility. The permit is modified as follows:

1) ***Remove 12 discharge points from the permit (001, 002, 004, 005, 007, 008, 010 – 015). Four outfalls will remain on the permit (003, 006, 009, 016). See Part I.B.14.***
2) ***Add instream monitoring location on lower Badwater Creek (BWC2) near Shoshone, WY at Bonneville rail crossing. This location will be sampled quarterly for iron sulfide, dissolved oxygen, biological oxygen demand, pH, and total suspended solids. See Part I.A.2.c.***
3) ***Remove effluent limits for Radium 226, Barium, and Zinc based on site-specific effluent data collected within and below the facility. Sampling requirements for these constituents are discontinued at the outfalls with this modification. Radium and Barium are now required to be sampled at the downstream monitoring point (DMP1) in Alkali Creek. These changes are made in accordance with anti-backsliding provisions in 40 CFR 122.44 (l)(2)(i)(B)(1), which allows a discharge permit modification to include less stringent effluent limits if information is available which was not available at the time of permit issuance. See Part I.A.1.a.***

4) ***Remove routine sampling requirements for Aluminum, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium. These constituents did not have effluent limits established in the permit. The original purpose of the sampling requirement was to determine whether or not effluent limits were needed. Sampling data from the facility confirms that the effluent concentrations of these constituents are well below water quality standard thresholds, and no reasonable potential exists for exceedance. See Part I.A.1.a.***
5) ***Add clarification regarding low-flow discharges. Sampling at a given outfall location is only required if discharge from the outfall reaches Alkali Creek during a given monitoring period. Alkali Creek is the uppermost water of the state occurring below the outfalls. See Part I.A.1.a.***

General Description: This facility is a gas production treatment unit that separates gas from formation waters at the surface using a gun barrel technology, and skim ponds and tanks. The permit authorizes the discharge of produced water from conventional oil and/or gas facilities to waters of the state if the effluent quality complies with effluent limits established by this permit. Development of permit limits involves considering all federal and state regulations and standards and incorporates the most stringent requirements into the permit. The effluent limits established in this permit are based upon Chapters 1 and 2 of the Wyoming Water Quality Rules and Regulations, 40 CFR Part 435 Subpart E, and other evaluations conducted by WDEQ related to this industry. This permit does not allow discharges of drilling fluids, acids, stimulation waters or other fluids derived from the drilling or completion of the wells.

Facility Description: This facility discharges approximately 2 million gallons per day (MGD) of produced water. The discharge undergoes some passive oil-water separation and settling of solids using retention pits prior to the final points of discharge. From 2016 to 2019, this facility employed a reverse osmosis unit (Neptune Plant) used for treating and then blending produced water. The plant was intended to aide in the expansion of the facility's produced water output under the permit's salt load restrictions. More water could be discharged if salts were removed from the water. However, the reverse osmosis treatment unit at this facility has become inoperable due to some ongoing technical issues at the plant. Therefore, the facility is reverting to its historic basic operation of discharging untreated (or only passively treated) water at lower volumes. This facility discharges into Alkali Creek, a tributary of Badwater Creek approximately 40 stream miles upstream from Boysen Reservoir, which is located on the Wind River mainstem. The Wind River in the canyon below Boysen Dam is a Class 1 river segment, protected by WDEQ as an "outstanding water." Under Chapter 1, Section 4 of the Wyoming Water Quality Rules and Regulations, "Class 1 waters are those surface waters in which no further water quality degradation by point source discharges other than from dams will be allowed.... the water quality and physical and biological integrity which existed on the water at the time of designation will be maintained and protected." The Wind River below Boysen Reservoir was designated as a Class 1 water in 1979. This particular discharge facility (Frenchie Draw Gas Field) originated in the mid-1960's. Discharges from this facility have remained essentially unchanged since the designation of the downstream Wind River segment as a Class 1 water in 1979. This discharge is not considered to be a new or expanded discharge. Therefore the facility itself represents an allowable background condition that complies with Chapter 1 restrictions on new discharges to Class 1 waters.

Compliance Schedule:

This permit includes a compliance schedule for Chloride final effluent limits.

Chloride: The previous permit versions for this facility did not include water quality based chloride effluent limits for protection of Badwater Creek as a class 2AB stream (cold water fishery). The chloride standard for class 2AB waters in Wyoming is 230 mg/L. A review of the long term effluent data from this facility indicates that the average chloride concentration at the outfalls is around 2,200 mg/L. Based on this, WDEQ has determined that there is a reasonable potential for this facility to exceed the instream standard for chloride in Badwater Creek. The permit establishes a final effluent limit of 230 mg/L for chloride, effective September 1, 2024. The purpose of the four-year compliance schedule is to allow the permittee time to install additional treatment capacity and optimize its output, in order to meet the final effluent limit of 230 mg/L from the outfalls at this facility. During the 4-year interim period for this compliance schedule, annual reports shall be submitted to WDEQ as outlined below, in accordance with 40 CFR § 122.47. In addition, Badwater Creek below this project area is a candidate stream segment for a site-specific chloride standard. If the chloride standard on Badwater Creek is revised prior to the final compliance schedule deadline of September 1, 2024, then the final effluent limit for chloride in this permit will be modified accordingly.

Compliance Schedule

Deadline	Milestone	Effluent Limit at outfalls 003, 006, 009, 016
June 30, 2021	Submit report on design and implementation schedule for water treatment upgrades.	**Chloride = N/A**
June 30, 2022	Submit update report on schedule and implementation for treatment upgrades .	
June 30, 2023	Submit update report on schedule and implementation for treatment upgrades .	
June 30, 2024	Finalize construction and optimization for treatment upgrades. Submit progress report.	
September 1, 2024	Full compliance with final effluent limits.	**Chloride = 230 mg/L (Final)**

Instream Monitoring: In addition to routine outfall sampling, this permit requires sampling at two downstream locations (DMP1, BWC1) for TDS, chloride, oil & grease, pH, dissolved oxygen and temperature. Additionally, the uppermost monitoring station (DMP1) includes monitoring for various reasonable potential screening constituents and BTEX constituents (Benzene, Toluene, Ethylbenzene, Xylene). A third monitoring station (BWC2) requires sampling for iron sulfide, dissolved oxygen, biological oxygen demand, pH, and total suspended solids. Monitoring station DMP1 is at the very downstream end of the project area on Alkali Creek. Monitoring station BWC1 is on Badwater Creek, just below its confluence with Alkali Creek. Monitoring station BWC2 is the lowermost station, and is located near the Bonneville rail crossing on Badwater Creek. All instream monitoring locations are for data collection purposes only, and do not constitute regulated discharge points under the permit.

Technology Based Effluent Limits

Chapter 2, Appendix H of the Wyoming Water Quality Rules and Regulations establishes, at a minimum, the following effluent limits for oil and gas production facilities in Wyoming, at each outfall:

Parameter	Technology Based Effluent Limit
Total Dissolved Solids (TDS)	***N/A (based on historic livestock use of the produced water)***
Sulfates	**3,000 mg/L**
Chlorides	**2,000 mg/L**
pH	**6.5 – 9.0**
Oil and Grease	**10 mg/L**

These technology based effluent limits are included in Part I of the permit below, with the exception of chloride. Because the applicable instream criterion for chloride in Badwater Creek below this facility is 230 mg/L (more stringent than 2,000 mg/L), the final effluent limit in the permit for chloride is established at the more stringent water quality based level.

TDS is limited by load (908 tons/month) in this permit, rather than by concentration. Chapter 2, Appendix H of the Wyoming Water Quality Rules and Regulations establishes a general TDS limit of 5,000 mg/L for produced water discharges at oil and gas facilities. However, a provision is included in those rules for modification of technology based limits on a case-by-case basis if a signed letter of beneficial use is provided by the landowner, specifically requesting that the discharge in question be allowed to continue. Such a letter has been submitted to WDEQ by the landowner at this facility, who uses the water for livestock. Therefore, this permit includes a modified TDS limit of 908 tons/month instead of 5,000 mg/L, pursuant to conditions in Chapter 2, Appendix H(c)(i) – Permits for facilities pre-dating 1978.

Water Quality Based Effluent Limits

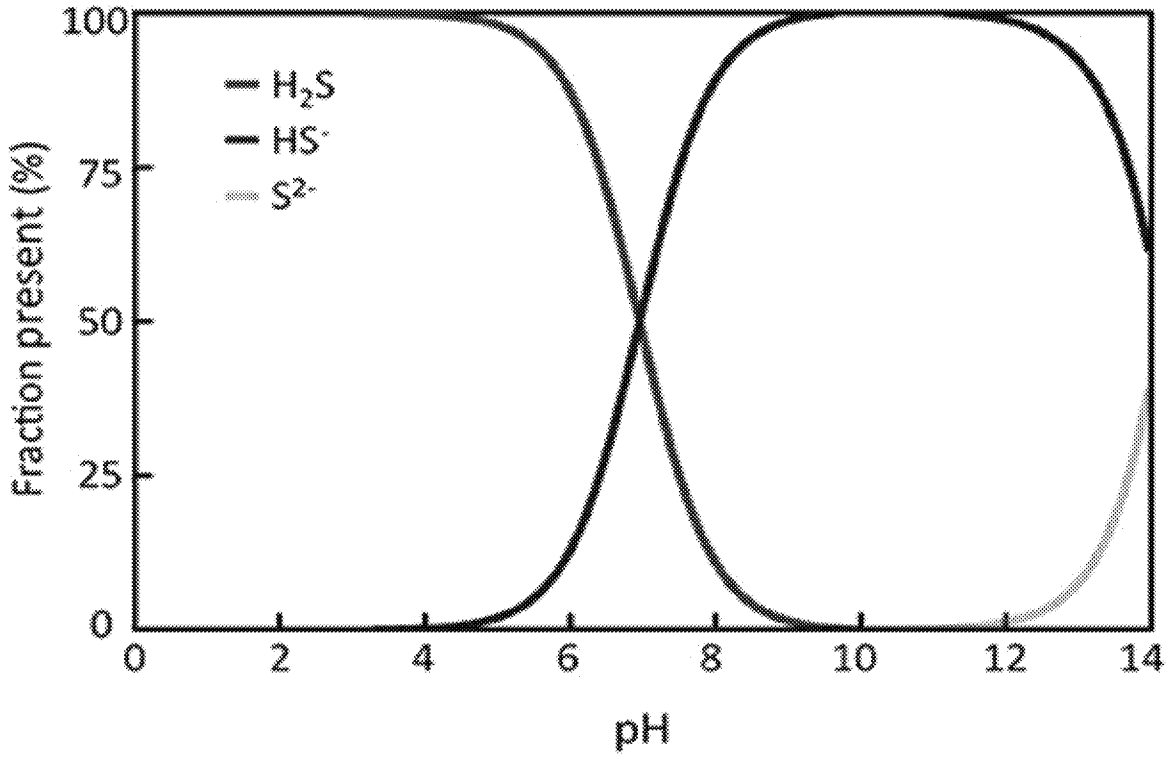
Effluent limits consistent with instream water quality standards have been calculated to protect all downstream waters below this facility. Using existing effluent data from the facility, a reasonable potential analysis was conducted to determine whether an effluent limit was needed. In conducting this analysis, the potential to exceed any applicable downstream water quality standards was considered, including water quality standards in the Wind River below Boysen Dam (Class 1), Boysen Reservoir (Class 2AB), Badwater Creek (Class 2AB), and Alkali Creek (Class 3B). Of those waters, Badwater Creek represents the most sensitive case for mixing because it is a Class 2AB water, but has no available dilution due to its extended low flow periods. Badwater Creek is also the first downstream Class 2AB water intercepted by the discharge. Therefore, water quality based effluent limits in this permit are calculated to prevent an exceedance of instream standards within Badwater Creek. By doing this, all other downstream waters are protected. Alkali Creek is a Class 3 water with fewer designated uses than Badwater Creek and identical water quality criteria for the uses it does have in common with Badwater Creek (aquatic life, livestock and wildlife watering, secondary recreation, industry, scenic value). Boysen Reservoir (Class 2AB) and Wind River below Boysen Dam (Class 1) are water bodies with all of the same designated uses as Badwater Creek,

but with significantly more available dilution. Therefore, by setting effluent limits to protect Badwater Creek, all downstream water bodies are protected by association. This approach is consistent with EPA's effluent limit calculations for NPDES oil and gas permits on the Wind River Reservation within this basin. Effluent limits in those permits are generally calculated based on protection of the immediate downstream Class 2 water bodies. In addition, this permit renewal maintains the existing monthly load limit for total dissolved solids (908 tons per month). EPA's permits within the Boysen Reservoir Basin do not place a cap on the monthly load of salts. However, WDEQ has determined that for its own permitting purposes, a load limit on salt entering Boysen Reservoir and the downstream Wind River is a necessary and appropriate mechanism to maintain existing water quality there, in this case.

In addition, recently monitored stream conditions within Badwater Creek and Alkali Creek indicate a need for additional controls on temperature and total sulfide in the facility's effluent. These are not covered under the same compliance schedule as Chloride because reduction of temperature and total sulfide in effluent can generally be accomplished with less sophisticated treatment than what is required for chloride removal. Temperature and total sulfide reduction is generally accomplished through enhanced aeration and/or oxidation of the effluent prior to discharge.

Temperature: Chapter 1, Section 25 of the Wyoming Water Quality Rules and Regulations Requires that permitted discharges into Class 2AB waters, such as Badwater Creek, do not heat up those waters more than 2 degrees Fahrenheit (1.1 degree Celsius). In addition, when background temperatures in Class 2AB waters exceed 68 degrees F naturally, no heating at all is allowed from discharges during those times. Data collected by WDEQ in 2019 indicates that average background conditions in the warmer months of the year (April – September) already exceed 68 degrees naturally in Badwater Creek. The average temperature for that period was measured at 69 degrees F in Badwater Creek, upstream of any influence from the Moneta Divide facility. The Moneta Divide effluent enters Badwater Creek at around 77 degrees Fahrenheit. Based on this, WDEQ has determined that there is a reasonable potential for this facility to exceed the instream standard for Temperature in Badwater Creek. At a background temperature of 68 degrees F or higher, no assimilative capacity exists in Badwater Creek for added temperature. Therefore, the goal of this permit with regard to temperature control is to ensure that discharges entering Badwater Creek from Alkali Creek are no greater than 68 degrees F by the time they reach Badwater Creek. Data collected in this project area indicates that the effluent undergoes an average natural temperature decline of 20 degrees Fahrenheit (From 97 degrees F to 77 degrees F) in the course of its travel down Alkali Creek before reaching Badwater Creek. Since the goal is to prevent effluent greater than 68 degrees F from entering Badwater Creek, WDEQ has determined that a final effluent limit of 88 degrees Fahrenheit at the outfalls is necessary as an upper maximum for effluent temperature.

Total Sulfide: The aquatic life numeric criterion for Hydrogen Sulfide in Wyoming is 2 µg/L. However, labs do not generally measure hydrogen sulfide in water directly. Rather, Total Sulfide is measured and sulfide species are determined according to the pH of the sample. The following chart illustrates the empirical relationship between pH and sulfide species.



Based on a review of the long term discharge data for this facility, the median pH of the effluent is 7.9. According to the above plot, at a pH of 7.9, approximately 10% of the Total Sulfide exists as Hydrogen Sulfide (H_2S). Given that the instream standard for Hydrogen Sulfide is 2 µg/L, a Total Sulfide level of 20 µg/L or less at the outfalls would be required to achieve an output level 2 µg/L or less for Hydrogen Sulfide. The average Total Sulfide in the effluent at this facility is around 400 µg/L, based on long term discharge data. Therefore, WDEQ has determined that there is a reasonable potential for this facility to exceed the instream standard for Hydrogen Sulfide in Alkali Creek. The permit establishes a final effluent limit of 20 µg/L for Total Sulfide at each outfall, in order to meet the instream standard of 2 µg/L for Hydrogen Sulfide.

Based on the above considerations, this permit establishes the following water quality based effluent limits at each outfall. These effluent limits are derived from Class 2AB quality standards in Chapter 1 of the Wyoming Water Quality Rules and Regulations:

Parameter	**Water Quality Based Effluent Limit**
Chloride	**230 mg/L (final, beginning 7/1/2024)**
Total Sulfide	**20 µg/L**
Temperature	**88 degrees F**
Dissolved Iron	**1,000 µg/L**
Total Dissolved Solids*	**908 tons per month**

**The reported monthly loads for the whole facility (SUM) will be the sum of TDS loads from each individual outfall. Each outfall is calculated using the formula below. Please note that the TDS concentrations must be in mg/L in this formula. After each outfall load is calculated, add all the outfall loads together and report the load for the facility in tons per month on discharge monitoring reports in outfall name "SUM."*

Load Calculation for each outfall (003, 006, 009, 016):

$$\frac{\textit{Outfall Flow (million gallons/month)} \times \textit{[TDS, mg/L]} \times \textit{8.34 lbs/gal}}{\textit{2000 lbs/ton}} = \textit{TDS Load (tons/mo)}$$

Load Calculation for whole facility (SUM):

Sum of loads from each outfall (tons/month)

Reasonable Potential - General

The above water quality based effluent limits are included in the permit because an analysis of existing effluent data indicated that a reasonable potential does exist for this facility to exceed the calculated limit. Effluent limits for Manganese, Fluoride, Uranium and E. coli were not included in the permit because based on available data, the facility has no reasonable potential to exceed the calculated effluent limits for those pollutants. In order to gather data for other parameters and make a determination on reasonable potential, the following constituents are required to be sampled routinely at the outfalls, in accordance with Part I.A.1 of the permit below:

Routine Sampling Constituents for Determination of Reasonable Potential
Benzene (µg/L)
Toluene (µg/L)
Ethylbenzene (µg/L)
Xylene (µg/L)

Results for the above parameters will be reviewed by WDEQ and used to conduct a reasonable potential analysis for the next permit term, or in the course of re-opening and modifying this permit if necessary.

Reasonable Potential Analysis Applicable to This Major Modification

NPDES regulations in 40 CFR § 122.44(d)(1)(i) – (iii) and WYPDES regulations in Chapter 2, Section 5(c)(iii)(C) of the Wyoming Water Quality Rules and Regulations require WDEQ to assess effluent with respect to approved water quality standards, to evaluate the impact of discharges on downstream water quality. This assessment is used to determine permit limitations that are protective of water quality uses. For this modification, WDEQ analyzed data for Radium, Barium, Zinc to determine if those pollutants have a reasonable potential (RP) to exceed water quality standards established in Chapter 1 of the WWQR. Effluent data for Radium and Barium were collected on Alkali Creek downstream of the outfalls, prior to the effluent entering Badwater Creek, which is the first class 2 water intercepted by the effluent. Water quality standards for Radium and Barium are not applicable to class 3 waters such as Alkali Creek. Effluent data values for zinc were collected at the facility outfalls since water quality standards for Zinc do apply on Class 3 waters such as Alkali Creek. The effluent data for all three analyzed pollutants were compared to applicable acute and chronic criteria values after consideration of pollutant variability in the discharge. Where a sample result had a concentration of "non-detect," WDEQ used a substitute value of half the detection limit, rather than assuming the concentration was zero. A quantitative reasonable potential evaluation was performed using statistical procedures consistent with EPA's *Technical Support Document for Water Quality Based Toxics Control*, March 1991 (TSD). A confidence level of 95% was used for all RP calculations. All results

for maximum expected concentrations were derived from multipliers in Table 3-2 of the above referenced TSD. RP analysis results for Radium, Barium and Zinc indicate no reasonable potential to exceed instream water quality standards, and therefore the effluent limits for these pollutants are removed with this modification. This permit action is done in accordance with anti-backsliding provisions in 40 C.F.R. 122.44(1)(2)(i)(B). See all analytical results below.

Additionally, facility effluent data for twelve other trace metals was reviewed by WDEQ and their RP was assessed with consideration of variability in the effluent. The outfall concentrations for all twelve parameters were generally non-detect, with two of the parameters showing two results each near the detection level lower boundary. WDEQ has determined that these twelve trace metals do not have a reasonable potential to exceed applicable instream water quality standards. Routine sampling for these twelve parameters is removed from the permit with this modification. These parameters did not have effluent limits in the previous permit. See "Summary of Additional Pollutant Results" below.

Barium

Barium Sample Location	Sample Date	Sample Concentration µg/L
Alkali Creek	11/6/2020	600
Alkali Creek	11/9/2020	480
Alkali Creek	11/13/2020	300
Alkali Creek	11/16/2020	360
Alkali Creek	11/18/2020	400

*Barium Sample Population (n)	5
Minimum	300 µg/L
Maximum	600 µg/L
Median	440 µg/L
Mean	430 µg/L
Standard Deviation	120 µg/L
Coefficient of Variation (CV)	0.3
Maximum Expected Concentration (@ 95% confidence level)	960 µg/L
Applicable Instream Water Quality Standard	2,000 µg/L
Reasonable Potential to Exceed Water Quality Standard?	**NO**

*A sixth sample with a concentration of 1,390 µg/L was reported for Barium. However, this was determined by WDEQ to be an outlier, using the interquartile test for the sample population. It is therefore not included in the final analyzed sample population.

Radium^{226}

Radium Sample Location	Sample Date	Sample Concentration pCi/L
Alkali Creek	5/31/2019	0.20
Alkali Creek	6/27/2017	0.20
Alkali Creek	6/27/2017	0.80

Radium Sample Population (n)	3
Minimum	0.20 pCi/L
Maximum	0.80 pCi/L
Median	0.20 pCi/L
Mean	0.40 pCi/L
Standard Deviation	0.35 pCi/L
Coefficient of Variation (CV)	0.9
Maximum Expected Concentration (@ 95% confidence level)	3.7 pCi/L
Applicable Instream Water Quality Standard	5 pCi/L
Reasonable Potential to Exceed Water Quality Standard?	**NO**

Zinc

Zinc Sample Location	Sample Date	Sample Concentration µg/L		Zinc Sample Location	Sample Date	Sample Concentration µg/L
Outfall 003	1/3/2017	*ND		Outfall 009	3/4/2019	ND
Outfall 006	1/3/2017	ND		Outfall 009	3/4/2019	ND
Outfall 001	5/2/2017	10		Outfall 001	5/1/2019	ND
Outfall 003	5/2/2017	10		Outfall 003	5/1/2019	ND
Outfall 006	5/2/2017	20		Outfall 006	5/1/2019	ND
Outfall 009	5/2/2017	ND		Outfall 009	5/20/2019	ND
Outfall 001	3/2/2018	ND		Outfall 001	7/1/2019	ND
Outfall 003	3/2/2018	ND		Outfall 003	7/1/2019	ND
Outfall 006	3/2/2018	ND		Outfall 006	7/1/2019	ND
Outfall 009	3/2/2018	ND		Outfall 009	7/1/2019	ND
Outfall 003	5/1/2018	ND		Outfall 001	9/3/2019	ND
Outfall 006	5/1/2018	ND		Outfall 003	9/3/2019	ND
Outfall 009	5/1/2018	ND		Outfall 006	9/3/2019	ND
Outfall 001	7/2/2018	ND		Outfall 009	9/3/2019	ND
Outfall 003	7/2/2018	ND		Outfall 001	11/1/2019	ND
Outfall 006	7/2/2018	ND		Outfall 003	11/1/2019	ND
Outfall 009	7/2/2018	ND		Outfall 006	11/1/2019	ND
Outfall 003	9/4/2018	ND		Outfall 009	11/1/2019	ND
Outfall 006	9/4/2018	ND		Outfall 003	1/3/2020	ND
Outfall 009	9/4/2018	ND		Outfall 006	1/3/2020	ND
Outfall 001	11/1/2018	ND		Outfall 009	1/3/2020	ND
Outfall 003	11/1/2018	ND		Outfall 016	1/3/2020	ND
Outfall 006	11/1/2018	ND		Outfall 003	3/9/2020	ND
Outfall 009	11/1/2018	ND		Outfall 006	3/9/2020	30
Outfall 003	1/3/2019	ND		Outfall 009	3/9/2020	ND
Outfall 006	1/3/2019	ND		Outfall 016	3/9/2020	ND
Outfall 009	1/3/2019	ND		Outfall 0016	5/5/2020	ND
Outfall 001	3/4/2019	30		Outfall 006	7/1/2020	ND
Outfall 001	3/4/2019	ND		Outfall 016	7/1/2020	ND
Outfall 003	3/4/2019	ND		Outfall 006	9/3/2020	ND

Outfall 003	3/4/2019	ND		Outfall 16	9/3/2020	ND
Outfall 006	3/4/2019	20		Outfall 016	2/1/2021	ND
Outfall 006	3/4/2019	ND		Outfall 009	6/2/2021	ND

Zinc Sample Population (n)	66
Minimum	5 µg/L
Maximum	30 µg/L
Median	5 µg/L
Mean	6 µg/L
Standard Deviation	5 µg/L
Coefficient of Variation (CV)	0.8
Maximum Expected Concentration (@ 95% confidence level)	45 µg/L
Applicable Instream Water Quality Standard	220 µg/L
Reasonable Potential to Exceed Water Quality Standard?	**NO**

*ND = Non-Detect. The detection level for Zinc using EPA method 200.8 is 10 µg/L. For samples with non-detect concentrations reported, a substitute value equal to half the detection level (5 µg/L) was used for statistical purposes in this RP analysis, rather than assuming the concentration was zero.

Summary of Additional Pollutant Results

The following chemical parameters were sampled at the facility outfalls, and all analytical results were below or near lab detection levels. These parameters did not have effluent limits in the existing permit, and were sampled in order to determine if effluent limits were necessary. WDEQ has reviewed the data for these chemical constituents, and has determined that there is no reasonable potential for these constituents to exceed instream water quality standards. No additional sampling is required for these constituents.

Chemical Parameter (At Outfall)	Sample Set (n)	Average Observed Concentration (µg/L)	Max Observed Concentration (µg/L)	Applicable Water Quality Standard* (µg/L)	Reasonable Potential to Exceed Water Quality Standard?
Aluminum	4	Non-Detect	Non-Detect	750	**NO**
Arsenic	10	Non-Detect	Non-Detect	150	**NO**
Beryllium	5	Non-Detect	Non-Detect	4	**NO**
Cadmium	10	Non-Detect	Non-Detect	0.4	**NO**
Chromium	9	Non-Detect	Non-Detect	130	**NO**
Copper	10	Non-Detect	11	16	**NO**
Lead	10	Non-Detect	Non-Detect	5	**NO**
Mercury	10	Non-Detect	Non-Detect	0.77	**NO**
Nickel	10	Non-Detect	Non-Detect	94	**NO**
Selenium	10	Non-Detect	2	5	**NO**
Silver	10	Non-Detect	Non-Detect	11	**NO**
Thallium	9	Non-Detect	Non-Detect	0.24	**NO**

*Applicable water quality standards for hardness dependent metals were calculated with a $CaCO_3$ hardness of 200 mg/L, which is the observed instream hardness within the receiving waters below this facility.

Antidegradation

Chapter 1, Section 8 of the Wyoming Water Quality Rules and Regulations requires WDEQ to consider existing water quality of the receiving waters when setting effluent limits in discharge permits, and to maintain the highest appropriate quality of those waters upon discharge. Wyoming's *Implementation Policy for Antidegradation* outlines three tiers of protection, based on the classification and existing quality of the receiving waters. Below is a summary of WDEQ's antidegradation review and implementation for each water body downstream of this facility.

Alkali Creek (Class 3B): This is a low-flow stream, generally flowing only in response to storm events, snowmelt, or man-made discharges to it. Uses protected for Class 3B streams such as this include aquatic life, industrial uses, secondary recreation, as well as livestock and wildlife watering. This stream is not considered a "high quality water" as contemplated in Section 4 of the Wyoming Surface Water Quality Standards Implementation Policy for Antidegradation. Therefore, it receives in this permit a "Tier 1" (basic) level of antidegradation protection. The effluent limits for protection of this stream are set equal to the applicable class 3B standards.

Badwater Creek (Class 2AB): This is an intermittent water body, with at least some base flow in certain segments. Designated uses on Class 2AB streams include all of the above uses for class 3B streams, in addition to fish and drinking water uses. There is no existing drinking water use for Badwater Creek, but non-game fish do inhabit certain segments. Badwater Creek is a relatively low-flow stream. Its critical low flows below this facility historically approach zero during certain dry times of the year. There is generally no dilution available in Badwater Creek during critical low flow conditions. Section 4(a)(i) of the Wyoming Implementation Policies for Antidegradation establishes that a new or increased loading from the source under review shall be considered not to result in significant degradation if it constitutes less than 10% of the existing total load to that stream segment. Because this facility and its discharge predate the 1975 Clean Water Act, and also pre-date the designation of Badwater Creek as a class 2AB stream (1990), and there is no new or increased load with this renewal beyond those historic discharge levels, then this facility is not considered by WDEQ to be a source of significant degradation at this time. This finding conforms with requirements for "Tier 2" protections on class 2AB waters, as outlined in Section 2 of the Wyoming Surface Water Quality Standards Implementation Policy for Antidegradation.

Boysen Reservoir (Class 2AB): This lake is classified as having the same designated uses as Badwater Creek above. However, it is a higher quality water than Badwater Creek and its existing uses include game fish, drinking water and primary contact recreation. Boysen Reservoir is not impaired for any water quality parameters listed in Chapter 1 of the Wyoming Water Quality Rules and Regulations. Sections 2 and 4 of the Wyoming Surface Water Quality Standards Implementation Policy for Antidegradation specify that a "Tier 2" level of protection applies to class 2AB waters such as this. Further, Section 4(a)(i)(A)(III) provides that permitted discharge activity shall be considered not to result in significant degradation if "the new or increased loading from the source under review will consume, after mixing, less than 20% of the available increment between low flow pollutant concentrations and the relevant standards (assimilative capacity), for critical constituents." WDEQ has reviewed the expected mixed concentrations of effluent within the Boysen Reservoir system, and has determined that the above condition is maintained. No pollutants from this facility are expected to result in mixed concentrations that consume 20% or more of the available assimilative capacity within the lake. Therefore, WDEQ's review has concluded that continued discharges from this facility will not result in significant degradation of Boysen Reservoir. In addition, the discharges will not result in any impairments of the lake, or lowering of water quality below the criteria established in Wyoming's standards.

Wind River Below Boysen Dam (Class 1): As explained in the Statement of Basis above, Chapter 1, Section 4 of the Wyoming Water Quality Rules and Regulations defines Class 1 waters as "Outstanding waters….. in which no further water quality degradation by point source discharges other than from dams will be allowed…. the water quality and physical and biological integrity which existed on the water at the time of designation will be maintained and protected." These waters are subject to the highest level of antidegradation protection, "Tier 3." New or expanded direct discharges to Class 1 streams are generally not allowed. This is not a new or expanded discharge, and it is not a direct discharge to a Class 1 stream. As explained above, this discharge pre-dates the designation of Wind River below Boysen Dam as a Class 1 water. The discharge itself represents a background condition within the watershed of the receiving water bodies, including the Wind River Class 1 segment. Therefore this discharge, as permitted, has been determined by WDEQ to comply with requirements under Section 3 of the Wyoming Surface Water Quality Standards Implementation Policy for Antidegradation – Outstanding Aquatic Resources.

Screening for Well Additives and Hydraulic Fracturing Fluids

This gas field uses hydraulic fracturing in the course of its mineral development. In addition, the facility periodically uses well additives for maintenance and stimulation. Part I.A.1 of the permit establishes a general restriction that discharges of drilling fluids, acids, stimulation waters or other fluids derived from the drilling or completion of wells are not allowed under this permit. This is a standard restriction in all oil and gas WYPDES permits in Wyoming. Typically, down-hole chemicals are flushed from the well and taken elsewhere for proper disposal, in order to prevent commingling with the effluent discharge. However, given the permittee's eventual plans for a significant number of new wells to be brought on line and tied into the effluent stream, WDEQ has determined that additional precaution is necessary for this permit. A requirement is added for trace screening of well additives and hydraulic fracturing fluids in the discharge. The permittee already reports use of these chemicals to the Wyoming Oil and Gas Conservation Commission, pursuant to WOGCC Chapter 3, Section 45 requirements. That reporting includes a detailed list of the chemicals used, when they were used, and the relative concentrations of each chemical present. The frac chemical and well maintenance chemical data for this facility is available to the public. WDEQ has reviewed the data for these chemical additives, and has determined that ongoing sampling for the following constituents in the discharge would yield the highest likelihood of detecting any contamination from hydraulic fracturing or well maintenance fluids:

Chemical Name (µg/L)	*CAS #
Methanol	67-56-1
Isopropyl Alcohol	67-63-0
Diethanolamine	111-42-2
Ethylene Glycol	107-21-1

**Because these chemicals are commercial ingredients, the Chemical Abstracts Service (CAS) registry number is included. This is intended to ensure consistency in identification and analysis, since trade names and synonyms can vary for each chemical. A CAS number is unique and does not vary.*

Sampling and analysis for the above parameters shall be conducted at all outfalls, every six months. Levels for all of the above parameters are expected to be non-detectable in the produced water discharge. These chemicals generally do not occur in natural produced water discharge. If any of the above parameters are detected in the discharge from an outfall, WDEQ may order the permittee to cease discharge from that outfall until the source can be identified and controlled.

Whole Effluent Testing (Acute)

Upon issuance of this permit, the permittee shall, at least once annually, conduct acute static replacement toxicity tests on a grab sample from each discharging outfall. The replacement static toxicity tests shall be conducted in accordance with the procedures set forth in *40 CFR 136.3* and the "*Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, Fifth Addition, October 2002, EPA 821-R-02-12*" (EPA Acute Method Manual). The permittee shall conduct an acute 48-hour static toxicity test using *Daphnia magna* and an acute 96-hour static toxicity test using *Pimephales promelas*. *Daphnia magna* has been selected by WDEQ as the invertebrate freshwater test species because it is considered to be more representative of aquatic communities in the plains-derived streams of Wyoming, such as Alkali Creek and Badwater Creek. Due to lack of high elevation snowpack to supply a steady and clean water supply, these streams are characterized by seasonal low flows and periodic elevated levels of natural salts. All tests will be conducted utilizing a multi-dilution series consisting of at least five (5) concentrations and a control as defined below:

100% effluent
85% effluent
67% effluent
50% effluent
25% effluent
control (or 0% effluent)

All tests will be conducted utilizing a minimum of 5 replicates for each test. In the event of inconclusive test results, the WDEQ reserves the right to require the permittee to perform additional tests at alternate dilutions and/or replicates. The WDEQ also reserves the right to require the submission of all information regarding all initiated tests, regardless of whether the tests were carried to completion or not.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration at any outfall. If acute toxicity occurs at any outfall during a sampling period, then WDEQ will assume that all outfalls, which have not yet been sampled, exhibit similar acute toxicity characteristics as well.

If more than 10 percent control mortality occurs, the test is not valid. The test shall be repeated until satisfactory control survival is achieved.

If acute toxicity occurs, an additional test on the failing outfall(s) shall be initiated within two (2) weeks of the date of when the permittee learned of the test failure. If only one species fails, retesting may be limited to this species. Should acute toxicity occur in the second test, the Toxicity Identification Evaluation (TIE) and Toxicity Reduction Evaluation (TRE) process described below shall be implemented on a schedule established by the WDEQ.

Annual test results shall be reported on a Discharge Monitoring Report (DMR) that must be submitted by January 28th of each year. The format for the report shall be consistent with the latest revision of the "Region VIII Guidance for Acute Whole Effluent Reporting", and shall include all chemical and physical data as specified.

If the results of two consecutive annual reports indicate no acute toxicity for all sampled outfalls, the permittee may reduce the monitoring to annual acute toxicity testing on only one species on an alternating basis. The test procedures for alternating species shall be the same as specified above.

Agricultural and wildlife use of water: Federal effluent guidelines, per 40 CFR Part 435 Subpart E, require utilization of the discharges of produced water from oil production units for agricultural or wildlife propagation when discharged. The Wyoming Game and Fish Department determined that discharge of produced water from all existing WYPDES-permitted oil production units in Wyoming enhances wildlife propagation and habitat. In addition, the landowner at the facility has submitted a letter, requesting continued use of the produced water for raising livestock. The discharge water from this facility is actually being put to that use. Hence, this facility complies with 40 CFR Part 435 Subpart E, if the discharge meets the effluent limits of this WYPDES permit.

Antidegradation, impairment review: The discharge of wastewater and the effluent limits established in this permit ensure that the levels of water quality maintain and protect the designated uses of the receiving waters. An antidegradation review verifies that the permit conditions, including the effluent limitations established, provide a level of protection to the receiving water consistent with the antidegradation provisions of Wyoming surface water quality standards. In addition, an evaluation of the receiving waters revealed that they are not on the 303(d) list as waterbodies that cannot support designated uses.

Other Permit Requirements: There shall be no discharge of floating solids or visible foam in other than trace amounts, nor shall the discharge cause formation of visible deposits of iron, hydrocarbons or any other constituent on the bottom or shoreline of the receiving water. In addition, erosion control measures will be implemented to prevent significant damage to or erosion of the receiving water channel at the point of discharge.

Self-monitoring of effluent quality and quantity is required on a regular basis. Reporting of results is required semi-annually. The permit is scheduled to expire on July 31, 2025.

Water Quality Division
Department of Environmental Quality
Major Modification Drafted 10-4-2021
Revision Date: 12-20-2021 – Jason Thomas

MODIFICATION OF AUTHORIZATION TO DISCHARGE UNDER THE WYOMING POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, (hereinafter referred to as "the Act"), and the Wyoming Environmental Quality Act,

Aethon Energy Operating, LLC

is authorized to discharge from the wastewater treatment facilities serving the

Frenchie Draw

located in

Sections NENE 16, SENE 17, NWNE 15, NENW 5, Township 37N, Range 89W, Fremont County.

to receiving waters named

Alkali Creek (class 3B), which is tributary to Badwater Creek (class 2AB), within the Boysen Reservoir Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III hereof.

This permit modification shall become effective on date of issuance below.

This permit and the authorization to discharge shall expire July 31, 2025 at midnight.

Jennifer Zygmunt, Administrator
Water Quality Division

Todd Parfitt, Director
Department of Environmental Quality

Date of Issuance: 1/14/2022

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Effective immediately and lasting through July 31, 2025, the quality of effluent discharged by the permittee shall, at a minimum, meet the limitations set forth below. This permit authorizes the permittee to discharge from outfall serial number(s) 003, 006, 009, 016.

This permit does not allow discharges of drilling fluids, acids, stimulation waters or other fluids derived from the drilling or completion of the wells.

a. The following effluent limits and sampling frequencies are established for outfalls 003, 006, 009, 016:

Parameter	Effluent Limit (Outfalls 003, 006, 009, 016)	Measurement Frequency	Reporting Frequency
Sulfates (mg/L)	3,000 mg/L	Quarterly	Quarterly
Chlorides (mg/L)	230 mg/L (Final, beginning 9/1/2024)	Quarterly	Quarterly
pH (standard units)	6.5 – 9.0	Quarterly	Quarterly
Oil and Grease (mg/)	10 mg/L	Quarterly	Quarterly
Total Sulfide (µg/L)[1]	20 µg/L	Quarterly	Quarterly
Temperature	88 degrees F	Quarterly	Quarterly
Dissolved Iron (µg/L)	1,000 µg/L	Quarterly	Quarterly
Total Dissolved Solids[2] (Load, tons per month)	*908 tons per month*	Monthly	Quarterly
Flow (MGD)	N/A	Daily	Quarterly
Dissolved Oxygen (mg/L)	N/A	Quarterly	Quarterly
Chemical Oxygen Demand (mg/L)	N/A	Quarterly	Quarterly
Benzene (µg/L)	N/A	Quarterly	Quarterly
Toluene (µg/L)	N/A	Quarterly	Quarterly
Ethylbenzene (µg/L)	N/A	Quarterly	Quarterly
Xylene (µg/L)	N/A	Quarterly	Quarterly
Total Ammonia as N, mg/L	N/A	Quarterly	Quarterly
Total Nitrogen, mg/L	N/A	Quarterly	Quarterly
Nitrate + Nitrite Nitrogen	N/A	Quarterly	Quarterly
Total Phosphorus	N/A	Quarterly	Quarterly
Orthophosphate Phosphorus	N/A	Quarterly	Quarterly

1) The practical detection level (reporting limit) for total sulfide is 50 µg/L, using EPA approved test methods. Since the calculated effluent limit of 20 µg/L is below the reporting limit of 50 µg/L, a result of 'non-detectable' is compliant with permit requirements. The permit does not require detection of sulfide down to 20 µg/L.

2) The reported monthly TDS load for the whole facility (SUM) will be the sum of loads from each individual outfall for each constituent. Each outfall load is calculated using the formula below. Please note that the constituent concentrations must be in mg/L in this formula. After each outfall load is

calculated, add all the outfall loads together and report the load for the facility in tons per month on discharge monitoring reports in outfall name "SUM."

Load Calculation for each outfall (003, 006, 009, 016):

$$\frac{\text{Outfall Flow (million gallons/month)} \times [\text{TDS, mg/L}] \times 8.34 \text{ lbs/gal}}{2000 \text{ lbs/ton}} = \text{TDS Load (tons/mo)}$$

Load Calculation for whole facility (SUM):

Sum of loads from each outfall (tons/month)

Any parameters listed above, which do not have effluent limits at this time, are being sampled to determine if future effluent limits are necessary for them at this facility. Data gathered from this sampling will be used to conduct a reasonable potential analysis. If WDEQ determines that there is a reasonable potential for any given sampled parameter to exceed an instream water quality standard, then WDEQ will add an appropriate effluent limit through modification of the permit or upon renewal.

Discharge shall be sampled at the outfall during any monitoring period in which effluent from that outfall reaches Alkali Creek. Alkali Creek is the uppermost water of the state occurring below the outfalls. Outfall 016 is located directly on Alkali Creek, and all discharge from outfall 016 reaches Alkali Creek. Outfalls 003, 006, and 009 discharge to upland swales located above but not directly on Alkali Creek. If no discharge reaches Alkali Creek from a permitted outfall location for an entire monitoring period, then "no discharge" shall be reported in the discharge monitoring report (DMR) for that outfall during that monitoring period. It is the responsibility of the permittee to determine whether or not effluent from a permitted outfall location is reaching Alkali Creek. If the effluent is reaching Alkali Creek, a sample must be collected and analyzed in accordance permit sampling requirements. If the effluent does not reach Alkali Creek during an entire monitoring period, then no sample is required and "no discharge" shall be reported in the DMR for the non-discharging outfall. At a minimum, a complete DMR must be submitted by the permittee for each outfall and for each reporting period, regardless of whether effluent reaches Alkali Creek or not.

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units in any single grab sample.

The permittee may discharge produced water from any authorized well to any permitted outfall, as long as all permit limits and requirements are met.

There shall be no discharge of floating solids or visible foam in other than trace amounts, nor shall the discharge cause formation of a visible sheen or visible hydrocarbon deposits on the bottom or shoreline of the receiving water.

All waters shall be discharged in a manner to prevent erosion, scouring, or damage to stream banks, streambeds, ditches, or other waters of the state at the point of discharge. In addition, there shall be no deposition of substances in quantities that could result in significant aesthetic degradation, or degradation of habitat for aquatic life, plant life or wildlife; or which could adversely affect public water supplies or those intended for agricultural or industrial use.

This permit requires implementation of the "Moneta Divide Channel Stability Monitoring and Mitigation Protocol", dated August 12, 2011, for erosion control. Quarterly monitoring reports are required for erosion monitoring, as prescribed in the abovementioned report. See Part I.B.3 of the permit for more reporting requirements and Appendix A for a full copy of the aforementioned report.

b. Compliance Schedule: Chloride Effluent limits for outfalls 003, 006, 009, 016:

Deadline	Milestone	Effluent Limit at outfalls 003, 006, 009, 016
June 30, 2021	Submit report on design and implementation schedule for water treatment upgrades.	**Chloride = N/A**
June 30, 2022	Submit update report on schedule and implementation for treatment upgrades .	
June 30, 2023	Submit update report on schedule and implementation for treatment upgrades .	
June 30, 2024	Finalize construction and optimization for treatment upgrades. Submit progress report.	
September 1, 2024	Full compliance with final effluent limits.	**Chloride = 230 mg/L (Final)**

2. Other Routine Monitoring:

a. Screening for Well Additives and Hydraulic Fracturing Fluids: Outfall(s) 003, 006, 009, 016

This permit requires routine sampling for trace screening of well additives and hydraulic fracturing fluids in the discharge. The permittee already reports use of these chemicals to the Wyoming Oil and Gas Conservation Commission, pursuant to WOGCC Chapter 3, Section 45 requirements. That reporting includes a detailed list of the chemicals used, when they were used, and the relative concentrations of each chemical present. The frac chemical and well maintenance chemical data for this facility is available to the public. WDEQ has reviewed the data for these chemical additives, and has determined that ongoing sampling for the following constituents in the discharge is appropriate for detecting any contamination from hydraulic fracturing or well maintenance fluids at this facility:

Chemical Name (µg/L)	*CAS #	Measurement Frequency	Reporting Frequency
Methanol	67-56-1	Semi-Annually	Semi-Annually
Isopropyl Alcohol	67-63-0	Semi-Annually	Semi-Annually
Diethanolamine	111-42-2	Semi-Annually	Semi-Annually
Ethylene Glycol	107-21-1	Semi-Annually	Semi-Annually

**Because these chemicals are commercial ingredients, the Chemical Abstracts Service (CAS) registry number is included. This is intended to ensure consistency in identification and analysis, since trade names and synonyms can vary for each chemical. A CAS number is unique and does not vary.*

Sampling and analysis for the above parameters shall be conducted at all outfalls, every six months. Levels for all of the above parameters are expected to be non-detectable in the produced water discharge. These chemicals generally do not occur in natural produced water discharge. If any of the above parameters are detected in the discharge from an outfall, WDEQ may order the permittee to cease discharge from that outfall until the source can be identified and controlled.

b. Instream Monitoring Point – (BWC1)

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies and reported quarterly.

Parameter	Measurement Frequency	Reporting Frequency
Total Dissolved Solids (mg/L)	Quarterly	Quarterly
Chloride (mg/L)	Quarterly	Quarterly
pH (standard units)	Quarterly	Quarterly
Temperature (degrees F)	Quarterly	Quarterly
Dissolved Oxygen (mg/L)	Quarterly	Quarterly
Oil & Grease (mg/L)	Quarterly	Quarterly

Samples taken in compliance with the monitoring requirements specified above shall be taken at the locations described in Table 1, in Part I(B)(14) of the permit.

c. Instream Monitoring Point – (BWC2)

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies and reported quarterly.

Parameter	Measurement Frequency	Reporting Frequency
Total Suspended Solids (mg/L)	Quarterly	Quarterly
Iron Sulfide (mg/L)	Quarterly	Quarterly
pH (standard units)	Quarterly	Quarterly
Dissolved Oxygen (mg/L)	Quarterly	Quarterly
Biological Oxygen Demand (mg/L)	Quarterly	Quarterly

Samples taken in compliance with the monitoring requirements specified above shall be taken at the locations described in Table 1, in Part I(B)(14) of the permit.

d. Downstream Monitoring Point – (DMP1)

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies and reported quarterly.

Parameter	Measurement Frequency	Reporting Frequency
Total Dissolved Solids (mg/L)	Quarterly	Quarterly
Chloride (mg/L)	Quarterly	Quarterly
pH (standard units)	Quarterly	Quarterly
Temperature (degrees F)	Quarterly	Quarterly
Dissolved Oxygen (mg/L)	Quarterly	Quarterly
Oil & Grease (mg/L)	Quarterly	Quarterly
Benzene (µg/L)	Quarterly	Quarterly
Toluene (µg/L)	Quarterly	Quarterly
Ethylbenzene (µg/L)	Quarterly	Quarterly
Xylene (µg/L)	Quarterly	Quarterly
Radium$^{226+228}$ (pCi/L)	Quarterly	Quarterly
Barium (µg/L)	Quarterly	Quarterly

Samples taken in compliance with the monitoring requirements specified above shall be taken at the locations described in Table 1, in Part I(B)(14) of the permit.

3. Whole Effluent Toxicity Testing:

a. Whole Effluent Testing (Acute)

Upon issuance of this permit, the permittee shall, at least once annually, conduct acute static replacement toxicity tests on a grab sample of the discharge from each discharging outfall. The replacement static toxicity tests shall be conducted in accordance with the procedures set forth in *40 CFR 136.3* and the "*Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, Fifth Addition, October 2002, EPA 821-R-02-12*" (EPA Acute Method Manual). The permittee shall conduct an acute 48-hour static toxicity test using *Daphnia magna* and an acute 96-hour static toxicity test using *Pimephales promelas*. All tests will be conducted utilizing a multi-dilution series consisting of at least five (5) concentrations and a control as defined below:

100% effluent
85% effluent
67% effluent
50% effluent
25% effluent
control (or 0% effluent)

All tests will be conducted utilizing a minimum of 5 replicates for each test. In the event of inconclusive test results, the WDEQ reserves the right to require the permittee to perform additional tests at alternate dilutions and/or replicates. The WDEQ also reserves the right to require the submission of all information regarding all initiated tests, regardless of whether the tests were carried to completion or not.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration at any outfall. If acute toxicity occurs at any outfall during a sampling period, then WDEQ will assume that all outfalls, which have not yet been sampled, exhibit similar acute toxicity characteristics as well.

If more than 10 percent control mortality occurs, the test is not valid. The test shall be repeated until satisfactory control survival is achieved.

If acute toxicity occurs, an additional test on the failing outfall(s) shall be initiated within two (2) weeks of the date of when the permittee learned of the test failure. If only one species fails, retesting may be limited to this species. Should acute toxicity occur in the second test, the Toxicity Identification Evaluation (TIE) and Toxicity Reduction Evaluation (TRE) process described below shall be implemented on a schedule established by the WDEQ.

Annual test results shall be reported on a Discharge Monitoring Report (DMR) that must be submitted by January 28thth of each year. The format for the report shall be consistent with the latest revision of the "Region VIII Guidance for Acute Whole Effluent Reporting", and shall include all chemical and physical data as specified.

If the results of two consecutive annual reports indicate no acute toxicity for all sampled outfalls, the permittee may reduce the monitoring to annual acute toxicity testing on only one species on an alternating basis. The test procedures for alternating species shall be the same as specified above.

b. Toxicity Identification Evaluation (TIE) and Toxicity Reduction Evaluation (TRE)

Should toxicity be confirmed in the permittee's discharge with a second consecutive failed WET test, a TIE-TRE shall be undertaken by the permittee to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control of, or treatment for the toxicity. A TIE-TRE plan must be submitted to the permitting authority within 45 days of the second consecutive WET test failure. Within 90 days of the second consecutive WET test failure, the permittee must initiate the TIE-TRE investigation. The investigation shall be concluded within one year of its initiation, unless otherwise indicated to the permittee by WDEQ.

If acceptable to the permit issuing authority, and if in conformance with current regulations, this permit may be reopened and modified to incorporate TIE-TRE conclusions relating to additional numerical limitations, a modified compliance schedule, and\or modified whole effluent protocol.

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in

this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by, the permit issuing authority.

2. Discharge Monitoring Report Reporting

Effluent monitoring results obtained during the previous monitoring period shall be summarized and reported on a Discharge Monitoring Report Form. If the permit requires whole effluent toxicity (WET) (biomonitoring) testing, WET test results must be reported on the most recent version of EPA Region 8 Guidance for Whole Effluent Reporting. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the Signatory Requirements (see Part II.A.11.), and submitted to the state water pollution control agency at the following address. The reports must be received by the agency no later than the 28th day of the month following the completed reporting period. The first report following issuance of this modification is due on April 28, 2022.

Wyoming Department of Environmental Quality
Water Quality Division
200 West 17th Street
Cheyenne, WY 82002
Telephone: (307) 777-7781

If no discharge occurs during the reporting period, "no discharge" shall be reported. If discharge is intermittent during the reporting period, sampling shall be done while the facility is discharging.

3. Channel Stability Monitoring and Mitigation Protocol

(See Appendix A, approved by WDEQ 8/12/2011)

A. The WDEQ-approved Channel Stability Monitoring and Mitigation Protocol (Appendix A) shall be implemented by the permittee.

B. The data collected in the Channel Stability Monitoring and Mitigation Protocol is not an effluent limit or otherwise used for compliance under this permit, but may be considered by WDEQ as a basis for re-opening this permit.

C. The permittee shall submit any modification(s) of the Channel Stability Monitoring and Mitigation Protocol to the WDEQ for its review and approval prior to implementation of any such change.

4. Erosion Control Report Submission

For the duration of the permit, at a minimum, the permittee shall complete the monitoring requirements as per "Moneta Divide Channel Stability Monitoring and Mitigation Protocol", dated August 12, 2011, and submit results of the monitoring to the WDEQ. Legible copies of the submitted monitoring reports shall be signed and certified in accordance with the Signatory Requirements contained in Part II.A.11 of permit WY0002062.

The permittee shall submit to WDEQ quarterly reports based on the WDEQ-approved protocol. Monitoring will be based on quarterly timeframes, from January through March, April through June, July through September, and October through December. The reports shall be received by

WDEQ quarterly by the 28th day of the first month following the completion of each quarter, and shall include all associated data that is specified in the Channel Stability Monitoring and Mitigation Protocol. The first quarterly report following issuance of this permit modification is due by April 28, 2022.

Monitoring reports shall be submitted to the WDEQ at the following address:

Wyoming Department of Environmental Quality
WYPDES Program, Water Quality Division
200 West 17th Street
Cheyenne, WY 82002
Telephone: (307) 777-7781

a) Report Contents

The quarterly submitted reports shall, at a minimum, contain the following information:

- a table listing the names and locations of the sites monitored and latitudes/longitudes of control points of all established cross sections, and
- all raw data and data analysis as required in Section 1 of the report, and
- the permittee's assessment of overall channel stability based on the gathered data, and
- any recommendations for changes to the monitoring program.

5. Definitions

a. A "composite" sample, for monitoring requirements, is defined as a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow.

b. The "daily maximum" shall be determined by the analysis of a single grab or composite sample.

c. An "instantaneous" measurement for monitoring requirements is defined as a single reading, measurement, or observation.

d. "MGD", for monitoring requirements, is defined as million gallons per day.

e. The "monthly average" shall be determined by calculating the arithmetic mean (geometric mean in the case of fecal coliform and E. coli) of all composite and/or grab samples collected during a calendar month.

f. "Net" value, if noted under Effluent Characteristics is calculated on the basis of the net increase of the individual parameter over the quantity of that same parameter present in the intake water measured prior to any contamination or use in the process of this facility. Any contaminants contained in any intake water obtained from underground wells shall not be adjusted for as described above and, therefore, shall be considered as process input to the final effluent. Limitations in which "net" is not noted are calculated on the basis of gross measurements of each parameter in the discharge, irrespective of the quantity of those parameters in the intake waters.

g. A "pollutant" is any substance or substances that, if allowed to enter surface waters of the state, causes or threatens to cause pollution as defined in the Wyoming Environmental Quality Act, Section 35-11-103.

h. The "weekly average" shall be determined by calculating the arithmetic mean (geometric mean in the case of fecal coliform and E. coli) of all composite and/or grab samples collected during any week.

6. Test Procedures

Test procedures for the analysis of pollutants, collection of samples, sample containers, sample preservation, and holding times, shall conform to regulations published pursuant to 40 CFR, Part 136, unless other test procedures have been specified in this permit.

7. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date and time of sampling;

b. The dates and times the analyses were performed;

c. The person(s) who performed the analyses and collected the samples;

d. The analytical techniques or methods used; and

e. The results of all required analyses including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine the results.

8. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated.

9. Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurements, report or application. This period may be extended by request of the administrator at any time. Data collected on site, copies of Discharge Monitoring Reports and a copy of this WYPDES permit must be maintained on site during the duration of activity at the permitted location.

10. Penalties for Tampering

The Act provides that any person who falsifies, tampers with or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two (2) years per violation, or both.

11. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

12. Facility Identification

All facilities discharging produced water shall be clearly identified with an all-weather sign posted at a visually prominent location. This sign shall, at a minimum, convey the following information:

a. The name of the company, corporation, person or persons who hold(s) the discharge permit; and

b. The name of the facility (lease, tank battery number, etc.) as identified by the discharge permit.

c. In addition, all outfall signs will include the outfall number.

13. Outlet Structures

The permittee shall construct and maintain all outlet structures so that there is a free fall from the discharge pipe sufficient to allow the collection of representative samples and the measurement of flow volume using the bucket and stopwatch technique.

If the volume of discharge is too large to make measurement of flow by the bucket and stopwatch technique practical, the permittee must be able to measure or calculate flow volume by another means to an accuracy of plus or minus ten percent of the actual flow.

14. Location of Discharge Points
See Table 1, Below.

Table 1: WY0002062 - Frenchie Draw Permit

Discharge Point	Previous Outfall ID	Units	QTR/ QTR	SEC-TION	TWP (N)	RNG (W)	LATITUDE	LONGITUDE	Drainage / Description
003	WY0002089-001	Graham Unit #5	NENE	16	37N	89W	43.18227	-107.52055	Alkali Creek via an unnamed drainage (all 3B)
006	WY0025542-001	Graham Unit #6	SENE	17	37N	89W	43.18139	-107.54137	Alkali Creek via an unnamed drainage (all 3B)
009	WY0027235-001	Graham Unit #7	NWNE	15	37N	89W	43.1830997	-107.5038942	Alkali Creek via an unnamed drainage (all 3B)
016	N/A	N/A	NENW	5	37N	89W	43.20901	-107.54879	Alkali Creek via Reservoir Creek (all 3B), Wind River Basin
DMP1	N/A	N/A	NWNW	36	38N	90W	43.22219	-107.5912935	Alkali Creek (3B), Wind River Basin
BWC1	N/A	N/A	NENE	18	38N	90W	43.326445	-107.69595	Badwater Creek Monitoring Point (Below Alkali Creek Confluence)
BWC2	N/A	N/A	NWNW	13	38N	93W	43.26628	-108.06923	Badwater Creek Monitoring Point at Bonneville Crossing

PART II

A. MANAGEMENT REQUIREMENTS

1. Changes

The permittee shall give notice to the administrator of the Water Quality Division as soon as possible of any physical alterations or additions to the permitted facility. Notice is required when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29 (b); or

b. The alteration or addition could change the nature or increase the quantity of pollutants discharged.

2. Noncompliance Notification

a. The permittee shall give advance notice of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

b. The permittee shall report any noncompliance which may endanger health or the environment as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Quality Division, Wyoming Department of Environmental Quality at (307) 777-7781.

c. A written submission shall be provided within five (5) days of the time that the permittee becomes aware of a noncompliance circumstance as described in paragraph b. above.

The written submission shall contain:

(1) A description of the noncompliance and its cause;

(2) The period of noncompliance, including exact dates and times;

(3) The estimated time noncompliance is expected to continue if it has not been corrected; and

(4) Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.

d. The following occurrences of unanticipated noncompliance shall be reported by telephone to the Water Quality Division, WYPDES Program (307) 777-7781 by the first workday following the day the permittee became aware of the circumstances.

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; or

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.

e. The administrator of the Water Quality Division may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Quality Division, WYPDES Program (307) 777-7781.

f. The permittee shall report all instances of noncompliance that have not been specifically addressed in any part of this permit at the time the monitoring reports are due.

3. Facilities Operation

The permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypass of Treatment Facilities

a. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

b. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section. Return of removed substances to the discharge stream shall not be considered a bypass under the provisions of this paragraph.

c. Notice:

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice at least 60 days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.A.2.

d. Prohibition of bypass.

(1) Bypass is prohibited and the administrator of the Water Quality Division may take enforcement action against a permittee for a bypass, unless:

(a) The bypass was unavoidable to prevent loss of life, personal injury or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(c) The permittee submitted notices as required under paragraph c. of this section.

e. The administrator of the Water Quality Division may approve an anticipated bypass, after considering its adverse effects, if the administrator determines that it will meet the three conditions listed above in paragraph d. (1) of this section.

6. Upset Conditions

a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improper designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph c. of this section are met.

c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required under Part II.A.2; and

(4) The permittee complied with any remedial measures required under Part II.A.4.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

7. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters or intake waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state.

8. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

a. In accordance with a schedule of compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities; or

b. If such alternative power source as described in paragraph a. above is not in existence and no date for its implementation appears in Part I, take such precautions as are necessary to maintain and operate the facility under its control in a manner that will minimize upsets and insure stable operation until power is restored.

9. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal act and the Wyoming Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the administrator of the Water Quality Division advance notice of any planned changes at the permitted facility or of any activity which may result in permit noncompliance.

10. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

11. Signatory Requirements

All applications, reports or information submitted to the administrator of the Water Quality Division shall be signed and certified.

a. All permit applications shall be signed as follows:

(1) For a corporation: by a responsible corporate officer;

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;

(3) For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected official.

b. All reports required by the permit and other information requested by the administrator of the Water Quality Division shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above and submitted to the administrator of the Water Quality Division; and

(2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

c. If an authorization under paragraph II.A.11.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new

authorization satisfying the requirements of paragraph II.A.11.b must be submitted to the administrator of the Water Quality Division prior to or together with any reports, information or applications to be signed by an authorized representative.

d. Any person signing a document under this section shall make the following certification:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

B. RESPONSIBILITIES

1. A. Providing Access

The permittee shall allow Department of Environmental Quality personnel and their invitees to enter the premises where the facility is located, or where records are kept under the conditions of this permit, and collect resource data as defined by Wyoming Statute § 6-3-414, inspect and photograph the facility, collect samples for analysis, review records, and perform any other function authorized by law or regulation. The permittee shall secure and maintain such access for the duration of the permit.

If the facility is located on property not owned by the permittee, the permittee shall also secure and maintain from the landowner upon whose property the facility is located permission for Department of Environmental Quality personnel and their invitees to enter the premises where a regulated facility is located, or where records are kept under the conditions of this permit, and collect resource data as defined by Wyoming Statute § 6-3-414, inspect and photograph the facility, collect samples for analysis, review records, and perform any other function authorized by law. The permittee shall secure and maintain such access for the duration of the permit.

If the facility cannot be directly accessed using public roads, the permittee shall also secure and maintain permission for Department of Environmental Quality personnel and their invitees to enter and cross all properties necessary to access the facility. The permittee shall secure and maintain such access for the duration of the permit.

B. Access Records

The permittee shall maintain in its records documentation that demonstrates that the permittee has secured permission for Department of Environmental Quality personnel and their invitees to access the permitted facility, including (i) permission to access the land where the facility is located, (ii) permission to collect resource data as defined by Wyoming Statute § 6-3-414, and (iii) permission to enter and cross all properties necessary to access the facility if the facility cannot be directly accessed from a public road. The permittee shall also maintain in its records a current map of the access route(s) to the facility and contact information for the owners or agents of all properties that must be crossed to access the facility. The permittee shall ensure that the documentation, map, and contact information are current at all times. The permittee shall provide the documentation, map, and contact information to Department of Environmental Quality personnel upon request. Upon termination of the permit, the permittee shall maintain such records for a period of three (3) years.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the regional administrator of the Environmental Protection Agency and the administrator of the Water Quality Division. The administrator of the Water Quality Division shall then provide written notification to the new owner or controller of the date in which they assume legal responsibility of the permit. The permit may be modified or revoked and reissued to change the name of the permittee and incorporate such other requirements as described in the federal act.

3. Availability of Reports

Except for data determined to be confidential under Section 308 of the federal act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Wyoming Department of Environmental Quality and the regional administrator of the Environmental Protection Agency. As required by the federal act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the federal act.

4. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the federal act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Changes in Discharge of Toxic Substances

Notification shall be provided to the administrator of the Water Quality Division as soon as the permittee knows of, or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) One hundred micrograms per liter (100 µg/L);

(2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/1) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21 (g) (7); or

(4) The level established by the director of the Environmental Protection Agency in accordance with 40 CFR 122.44 (f).

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
(1) Five hundred micrograms per liter (500 µg/L);

(2) One milligram per liter (1 mg/1) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21 (g) (7); or

(4) The level established by the director of the Environmental Protection Agency in accordance with 40 CFR 122.44 (f).

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. As long as the conditions related to the provisions of "Bypass of Treatment Facilities" (Part II.A.5), "Upset Conditions" (Part II.A.6), and "Power Failures" (Part II.A.8) are satisfied then they shall not be considered as noncompliance.

7. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

8. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the federal act.

9. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state or federal law or regulation. In addition, issuance of this permit does not substitute for any other permits required under the Clean Water Act or any other federal, state, or local law.

10. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights nor any infringement of federal, state or local laws or regulations.

11. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

12. Duty to Provide Information

The permittee shall furnish to the administrator of the Water Quality Division, within a reasonable time, any information which the administrator may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the administrator, upon request, copies of records required by this permit to be kept.

13. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the administrator of the Water Quality Division, it shall promptly submit such facts or information.

14. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

15. Permit Fees

Once this permit has been issued, the permittee will be assessed a $200.00 per-year permit fee by the Water Quality Division. The fee year runs from January 1st through December 31st. This permit fee will continue to be assessed for as long as the permit is active, regardless of whether discharge actually occurs. This fee is not pro-rated. If the permit is active during any portion of the fee year, the full fee will be billed to the permittee for that fee year. In the event that this permit is transferred from one permittee to another, each party will be billed the full permit fee for the fee year in which the permit transfer was finalized.

PART III

A. OTHER REQUIREMENTS

1. Flow Measurement

At the request of the administrator of the Water Quality Division, the permittee must be able to show proof of the accuracy of any flow measuring device used in obtaining data submitted in the monitoring report. The flow measuring device must indicate values of within plus or minus ten (10) percent of the actual flow being measured.

2. 208(b) Plans

This permit may be modified, suspended or revoked to comply with the provisions of any 208(b) plan certified by the Governor of the State of Wyoming.

3. Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary) or other appropriate requirements if one or more of the following events occurs:

a. The state water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit;

b. A total maximum daily load (TMDL) and/or watershed management plan is developed and approved by the state and/or the Environmental Protection Agency which specifies a wasteload allocation for incorporation in this permit;

c. A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit;

d. Downstream impairment is observed and the permitted facility is contributing to the impairment;

e. The limits established by the permit no longer attain and/or maintain applicable water quality standards;

f. The permit does not control or limit a pollutant that has the potential to cause or contribute to a violation of a state water quality standard.

g. If new applicable effluent guidelines and/or standards have been promulgated and the standards are more stringent than the effluent limits established by the permit.

h. In order to protect water quality standards in neighboring states, effluent limits may be incorporated into this permit or existing limits may be modified to ensure that the appropriate criteria, water quality standards and assimilative capacity are attained.

4. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended or revoked in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any terms or conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or

d. If necessary to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C) and (D), 304 (b) (2) and 307 (a) (2) of the federal act, if the effluent standard or limitation so issued or approved:

(1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

(2) Controls any pollutant not limited in the permit.

5. Toxicity Limitation - Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include a new compliance date, additional or modified numerical limitations, a new or different compliance schedule, a change in the whole effluent protocol or any other conditions related to the control of toxicants if one or more of the following events occur:

a. Toxicity was detected late in the life of the permit near or past the deadline for compliance;

b. The toxicity reduction evaluation (TRE) results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion;

c. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits and the permit issuing authority agrees that numerical controls are the most appropriate course of action;

d. Following the implementation of numerical controls on toxicants, the permit issuing authority agrees that a modified whole effluent protocol is necessary to compensate for those toxicants that are controlled numerically;

e. The TRE reveals other unique conditions or characteristics which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.

6. Severability

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit, shall not be affected thereby.

7. Penalties for Falsification of Reports

The federal act provides that any person who knowingly makes any false statement, representation or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation or by imprisonment for not more than two years per violation or both.